

ABB BALDOR RELIANCE III

Customer information packet

ECP4422T-4

150HP, 890RPM, 3PH, 60HZ, 449T, TEFC, FOOT,
Class - CLI GP A,B,C,D
Division - Division II

Specifications

Enclosure	TEFC
Frame	449T
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	CLI GP A,B,C,D
Haz Area Division	Division II
Motor Letter Type	Three Phase
Output @ Frequency	150.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	900 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
Agency Approvals	CCSAUSEEV
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Constant Torque Speed Range	15-60
Current @ Voltage	188.000 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	95.0 %
Feedback Device	NO FEEDBACK
Haz Area Temp Code	T3
Heater Indicator	No Heater
High Voltage Full Load Amps	188.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	G
Lifting Lugs	No Lifting Lugs
Motor Lead Quantity/Wire Size	6 @ 2 AWG
Motor Standards	NEMA

Part Detail

Revision	L
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A44WG1993
Layout	617427-003
Eff. date	10-24-2024
CD Diagram	416820-036
Poles	08
Leads	3#2 (02 per group)
Proprietary	False
Created date	01-09-2014

Motor Type	A44120M
Mounting Arrangement	F1
Number of Poles	8
Overall Length	53.24 IN
Power Factor	79
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Service Factor	1.15
Shaft Diameter	3.375 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	890 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None

Nameplate

NP3238														
CAT NO	ECP4422T-4				SPEC NO.		A44-5312-1993							
HP	150	AMPS	188			VOLTS	460			DESIGN	B			
FRAME	449T	RPM	890	HZ	60	AMB	40	SF	1.15					
D.E. BRG.DATA	6318	O.D.E. BRG.DATA				6318	PH	3	DUTY	CONT	INSUL.CLASS	F		
D.E. BRG.	90BC03J30X			TYPE	P	ENCL	TEFC	CODE	G					
O.D.E. BRG.	90BC03J30X	POWER FACTOR				79	NEMA NOM EFFICIENCY				95			
3/4 LOAD EFF.	95.4	MAX CORR KVAR				45.0	GUARANTEED EFFICIENCY				94.1			
TEMP CODE	T3	TEMP =	200											
CHP HZ	60-90	CT HZ	15-60	VT HZ	0-60									
INVERTER-TEMP-CODE	T3													
SER.NO.					MOTOR WEIGHT									

ABB BALDOR RELIANCE III							CUSTOMER INFORMATION PACKET							ECP4422T-4 - 150HP, 890RPM, 3PH, 60HZ, 449T, TEFC, FOOT						
S/O			FRAME			HP			TYPE			PHASE/ HERTZ			RPM			VOLTS		
			449T			150			P			3/60			890			460		
AMPS			DUTY			AMB °C/ INSUL			S.F.			NEMA DESIGN			CODE LETTER			ENCLOSURE		
188			CONT			40/F			1.15			B			G			TEFC-841		
E/S			ROTOR			TEST S.O.			TEST DATE			STATOR RES. @25 °C OHMS (BETWEEN LINES)								
401217			418143-93-BE			---			---			.0269								
PERFORMANCE																				
LOAD			HP			AMPERES			RPM			% POWER FACTOR			% EFFICIENCY					
NO LOAD			0			82.8			900			3.12			0					
1/4			37.6			93.1			898			40.8			92.5					
2/4			75.1			117			895			63.0			95.1					
3/4			112			150			892			73.6			95.4					
4/4			150			188			889			78.5			95.2					
5/4			188			231			886			80.4			94.7					
SPEED TORQUE																				
						RPM			TORQUE % FULL LOAD			TORQUE LB.-FT.			AMPERES					
LOCKED ROTOR						0			164			1451			1075					
PULL UP						180			150			1325			1040					
BREAKDOWN						853			235			2079			606					
FULL LOAD						889			100			886			188					
AMPERES SHOWN FOR 460 VOLT CONNECTION. IF OTHER CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.																				
TYPICAL DATA XE MOTOR - NEMA NOM. EFF. 95.0%																				
						DRAWN BY: <u>B.R.PENDLEY</u> CHECKED BY: <u>B.R.PENDLEY</u> APPROVED BY: <u>W.L.SMITH</u> DATE: <u>01/18/13</u>						AC MOTOR PERFORMANCE DATA			A44WG1993-R002 DATE ISSUED 03/05/14					

FRAME 449T

VOLTS 460

NEMA DESIGN B

TEST S.O. TYPICAL DATA

HP 150

AMPS 188

CODE LETTER G

TEST DATE ---

TYPE P

DUTY CONT

ENCLOSURE TEFC-841

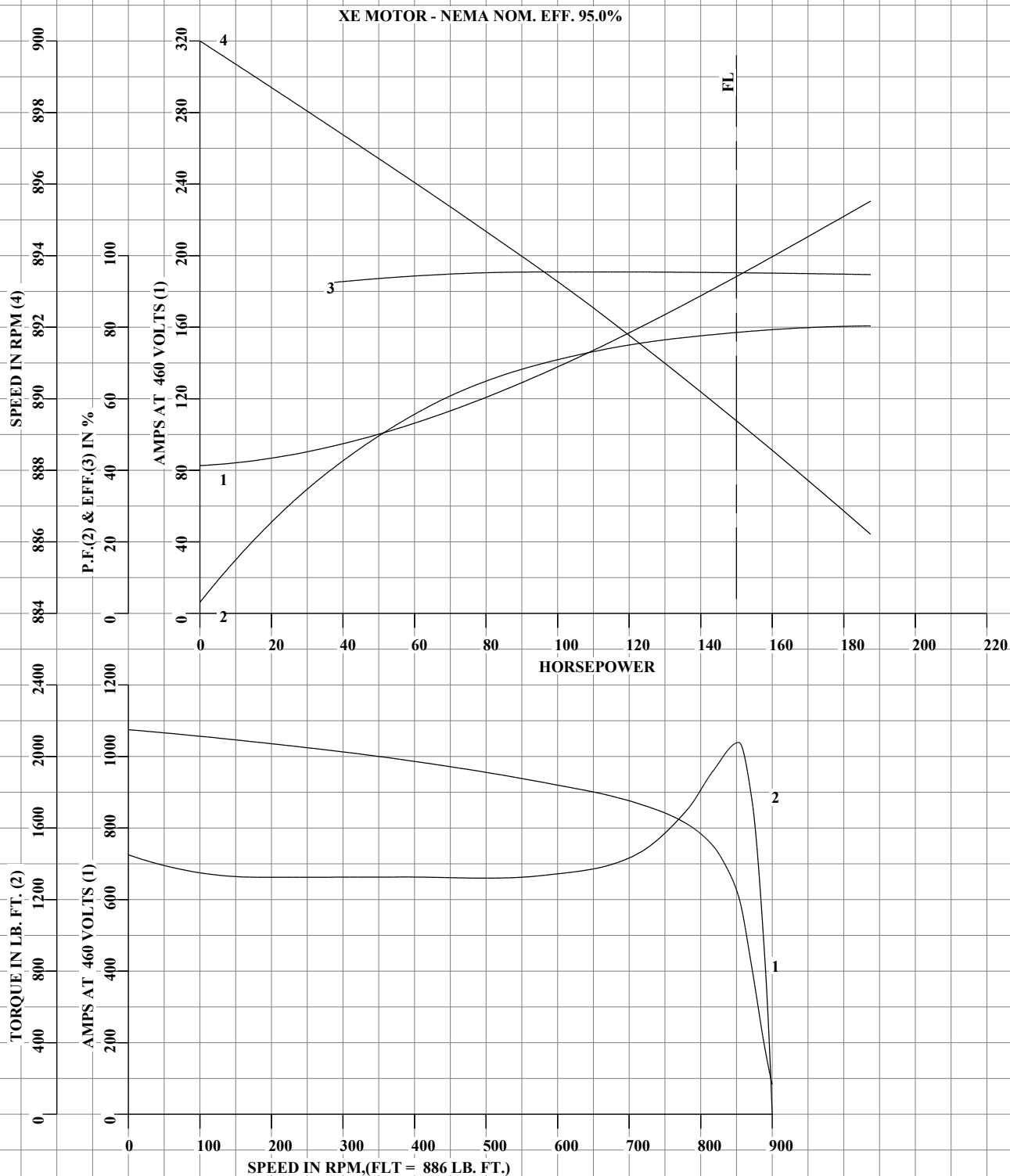
STATOR RES. @ 25°C .0269

PHASE / HERTZ 3/60

AMB °C / INSUL 40/F

E/S 401217

OHMS (BETWEEN LINES)



AMPERES SHOWN FOR 460 VOLT CONNECTION, IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.



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CHECKED BY: B.R.PENDLEY
APPROVED BY: W.L.SMITH
DATE: 01/18/13

AC MOTOR
PERFORMANCE
DATA

A44WG1993-R002

ISSUE DATE 03/05/14

FRAME 449T

RPM 890

S.F. 1.15

ROTOR 418143-93-BE

HP 150

VOLTS 460

NEMA DESIGN B

TEST S.O. TYPICAL DATA

TYPE P

AMPS 188

CODE LETTER G

TEST DATE ---

PHASE / HERTZ 3/60

DUTY CONT

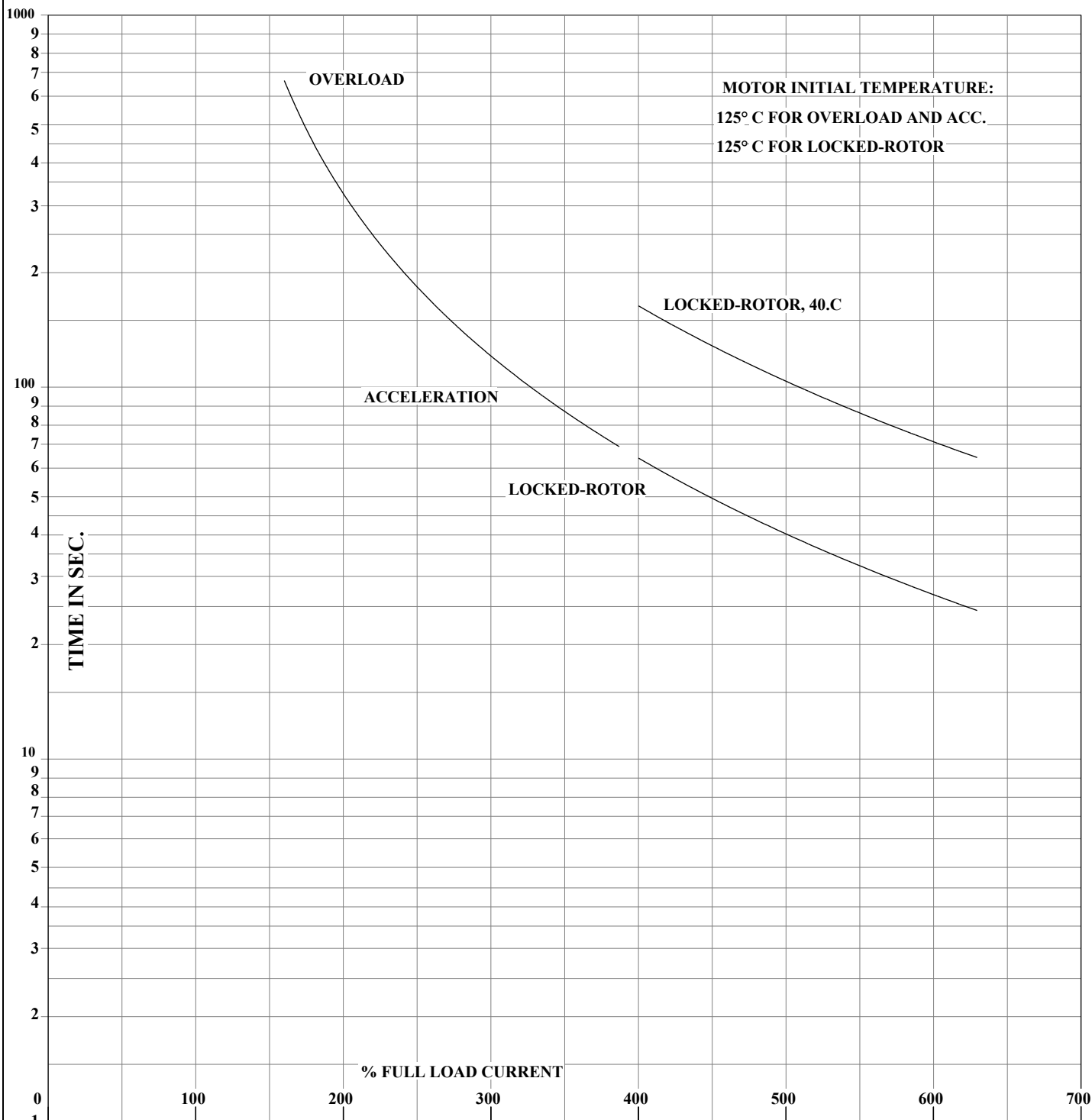
ENCLOSURE TEFC-841

STATOR RES. @ 25°C .0269

AMB °C / INSUL 40/F

E/S 401217

OHMS (BETWEEN LINES)



THERMAL LIMIT CURVE
XE MOTOR - NEMA NOM. EFF. 95.0%

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AC MOTOR
PERFORMANCE
DATA

A44WG1993-R002

ISSUE DATE 03/05/14

DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

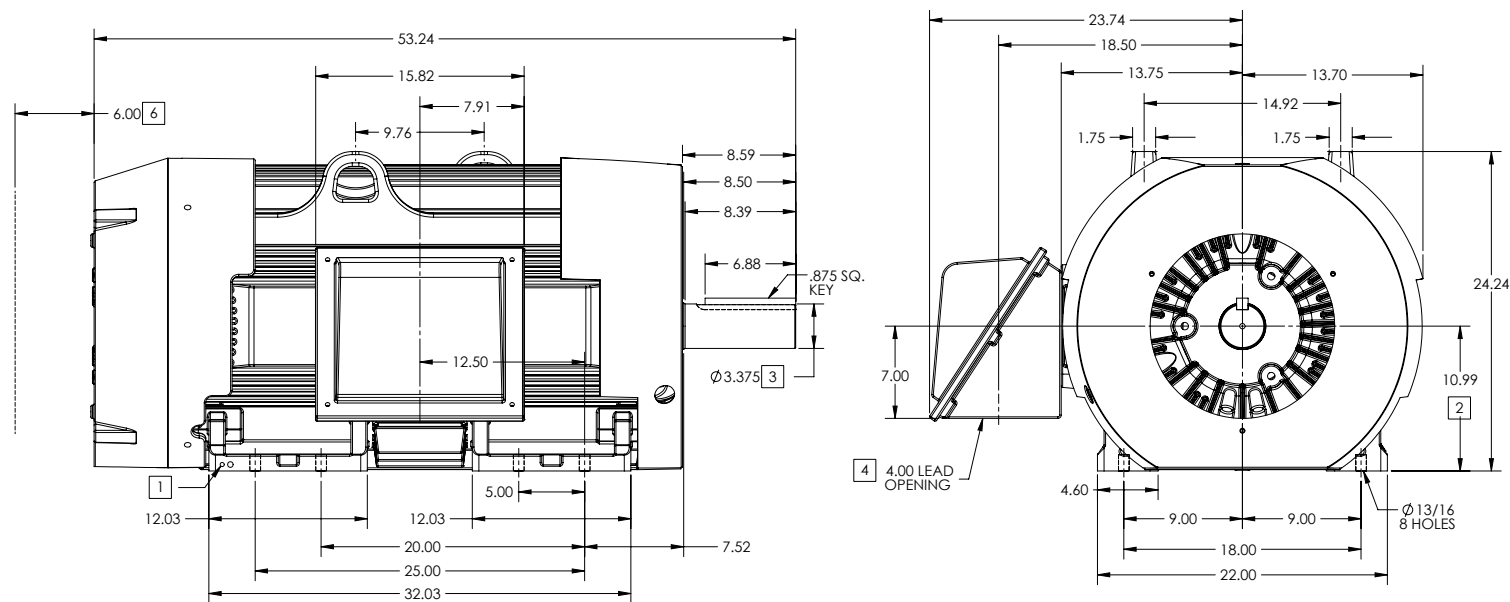
ENCLOSURE: TOTALLY ENCLOSED

FRAME 449T ABOVE NEMA RATINGS (1800 RPM MAX)

COOLING: FAN COOLED

MOUNTING: FOOT

INCLUDES 447T FRAME MOUNTING HOLES



1. GROUND HOLES QTY 1 1/2-13 TAP; QTY 1 3/8-16 TAP
2. VARIES +.00/-.06
3. VARIES +.000/-.001
4. ON STANDARD MOTORS THIS IS CONDUIT SIZE. ON XT AND CORROSION PROOF MOTOR THIS IS PIPE TAP.
5. MOTOR WEIGHTS MAY VARY BY 1.5% DEPENDING ON RATING.
6. OBSTRUCTION MUST NO ENCROACH ON AIR INLET

CONDUIT BOX LOCATED ON OPPOSITE SIDE WHEN F-2.
IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.
MAXIMUM PERMISSIBLE SHAFT RUNOUT WHEN MEASURED AT END OF
STANDARD SHAFT EXTENSION IS .003" T.I.R. TO 5 INCH DIA.

[5] WEIGHT (LBS): 3080

DRIVE END AIR DEFLECTOR IS ONLY INCLUDED WHEN NECESSARY.

DIMENSIONS ARE IN INCHES; SEE SHEET 2 FOR DIMENSIONS IN MILLIMETERS

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT MOTOR PERFORMANCE IS SUITABLE IN THE APPLICATION.

SHEET NUMBER
1 OF 2

500P-LCP-119

REV. DESC: NEW DRAWING	VERSION: 02	REVISED: 11/32/36 10/23/2017	TDR: 000001048162
MODEL NO. 617427-003	BY: RAGRA		

BALDOR

G449T-447T STD - FOOTED - SIDE/CENTER C/B

617427-003

DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

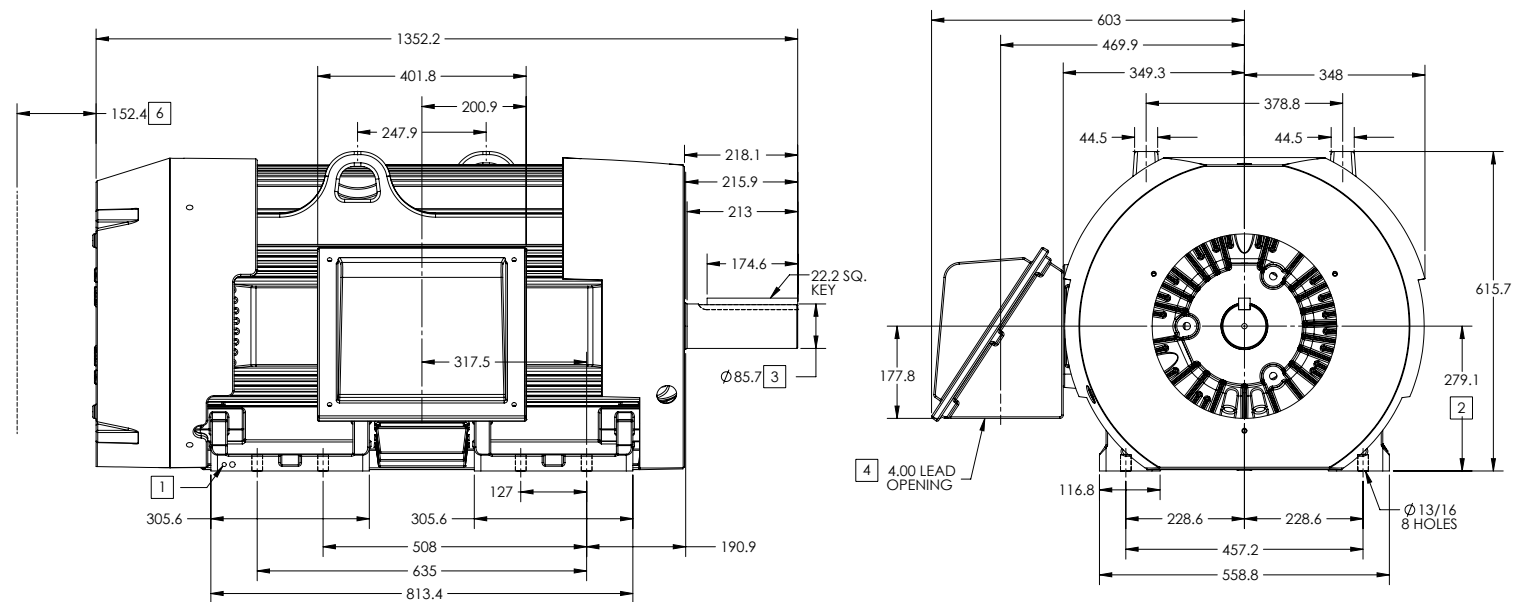
ENCLOSURE: TOTALLY ENCLOSED

FRAME 449T ABOVE NEMA RATINGS (1800 RPM MAX)

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2. VARIES +.00-.06
3. VARIES +.000-.001
4. ON STANDARD MOTORS THIS IS CONDUIT SIZE. ON XT AND CORROSION PROOF MOTOR THIS IS PIPE TAP.
5. MOTOR WEIGHTS MAY VARY BY 1.5% DEPENDING ON RATING.
6. OBSTRUCTION MUST NO ENCROACH ON AIR INLET

CONDUIT BOX LOCATED ON OPPOSITE SIDE WHEN F-2.
IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.
MAXIMUM PERMISSIBLE SHAFT RUNOUT WHEN MEASURED AT END OF
STANDARD SHAFT EXTENSION IS .08 MM T.I.R. TO 127 MM DIA.

[5] WEIGHT (KGS): 1400

DRIVE END AIR DEFLECTOR IS ONLY INCLUDED WHEN NECESSARY.

DIMENSIONS ARE IN MILLIMETERS; SEE SHEET 1 FOR DIMENSIONS IN INCHES

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT MOTOR PERFORMANCE IS SUITABLE IN THE APPLICATION.

 SHEET NUMBER
2 OF 2

500P-LCP-119

REV. DESC. NEW DRAWING			
REV: B	VERSION: 02	REVISED: 11/32/36 10/23/2017	TDR: 000001048162
MODEL NO. 617427-003			
BY: RAGRA			

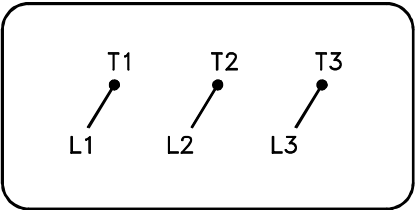
BALDOR

G449T-447T STD - FOOTED - SIDE/CENTER C/B

617427-003

416820-036

A-C MOTOR
CONNECTION DIAGRAM
STANDARD 3 LEAD CONNECTED



(N.P. 1575-BA)

416820-036

REV. DESC: LOADED TO BUS, C/R 335225		
REV. LTR: -	VERSION: 00	TDR: 000000538207
FILE: \MGA\00000\682		REVISED: 11: 54: 06 04/30/2010
MTL: -		BY: RAGRA

BALDOR

CONN DIAG - STANDARD 3 LEAD
SH 1 of 1